IN THE CLAIMS:

Please cancel claims 1-7, 9-19, 21-27, 29-33, 35, 37-38, 40-43, and 50

1. – 19. (Cancelled)

20. (Previously Presented) A method for allocating a spare disk to replace a failed disk in a network storage system, comprising:

maintaining a plurality of volumes in the network storage system, each volume associated with a set of disk storage units;

maintaining a plurality of spare disks in the network storage system;

attempting to determine the best spare disk by selecting those disks from the plurality of spare disks which meet at least one rule;

replacing the failed disk with the best spare disk;

in the event that no spare disk meets the at least one rule, selecting a spare disk which violates the at least one rule as a selected disk; and

notifying an administrator that the selected spare disk violates the rule.

21. -27. (Cancelled)

28. (Previously Presented) A network storage system, comprising:

means for maintaining a plurality of volumes in the network storage system, each volume associated with a set of disk storage units;

means for maintaining a plurality of spare disks in the network storage system;

means for attempting to determine a best spare disk by selecting those disks from the plurality of spare disks which meet at least one rule;

means for replacing the failed disk with the best spare disk;

in the event that no spare disk meets the at least one rule, means for selecting a spare disk which violates the at least one rule as a selected disk; and

means for notifying an administrator that the selected spare disk violates the rule.

29. – 33. (Cancelled)

34. (Previously Presented) A file server in a network storage system, comprising:

a storage adapter to connect to a plurality of disk storage units in the network storage system;

an operating system to maintain a plurality of volumes, each volume associated with a set of disk storage units, the set of disk storage units selected from the plurality of disk storage units;

the operating system maintaining a plurality of spare disks units selected from the plurality of disk storage units;

the operating system choosing a best spare disk of the plurality of spare disks to replace a failed disk, the failed disk associated with any volume of the network storage system;

the operating system attempting to determine a best spare disk by selecting those disks from the plurality of spare disks which meet at least one rule;

the operating system replacing the failed disk with the best spare disk;

in the event that no spare disk meets the at least one rule, the operating system selecting a spare disk which violates the at least one rule as a selected disk; and

the operating system notifying an administrator that the selected spare disk violates the rule.

35. – 38. (Cancelled)

39. (Currently Amended) ~~The method of claim 13~~ A method for allocating a spare disk to replace a failed disk in a network storage system, comprising:

maintaining a plurality of volumes in the network storage system, each volume associated with a set of disk storage units;

maintaining a plurality of spare disks in the network storage system;

choosing a best spare disk of the plurality of spare disks to replace a failed disk, the failed disk associated with any volume of the network storage system, wherein the best spare disk is chosen based upon a comparison of the speed of the spare disks and the failed disk; and

replacing the failed disk with the best spare disk.

40. – 44. (Cancelled)

45. (Previously Presented) A computer implemented method for allocating a spare storage device to replace a failed storage device in a network storage system, comprising:

identifying a set of spare storage devices in the network storage system; and

selecting a particular spare storage device of the set of spare storage devices to replace the failed storage device, the particular spare storage device selected using a size policy in which preference is given to a spare storage device with minimum storage space in excess of the storage space of the failed disk.

46. (Previously Presented) A computer implemented method for allocating a spare storage device to replace a failed storage device in a network storage system, comprising:

identifying a set of spare storage devices in the network storage system; and

selecting a best spare storage device of the set of spare storage devices to replace the failed storage device, the best spare storage device selected using a speed policy in which preference is given to a spare storage device with a speed closest to that of the failed disk.

47. (Previously Presented) The method of claim 46 wherein the speed is a rotation speed.

48. (Previously Presented) The method of claim 46 wherein the speed is a data read speed.

49. (Previously Presented) The method of claim 46 wherein the speed is a data write speed.

50. (Cancelled)

51. (Previously Presented) A computer readable medium comprising executable program instructions for allocating a spare storage device to replace a failed storage device in a network storage system, the executable program instructions adapted for:

identifying a set of spare storage devices in the network storage system; and

selecting a particular spare storage device of the set of spare storage devices to replace the failed storage device, the particular spare storage device selected using a size policy in which preference is given to a spare storage device with minimum storage space in excess of the storage space of the failed disk.

52. (Previously Presented) A computer readable medium comprising executable program instructions for allocating a spare storage device to replace a failed storage device in a network storage system, the executable program instructions adapted for:

identifying a set of spare storage devices in the network storage system; and

selecting a best spare storage device of the set of spare storage devices to replace the failed storage device, the best spare storage device selected using a speed policy in which preference is given to a spare storage device with a speed closest to that of the failed disk.